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FOS (Records Unit) DWPC

MONITORING VISIT NOTES

UNION OIL
LemontINDUSTRIAL WASTE TREATMENT
(197-GI-02)

Date -

August 13, 1974

Interviewed -

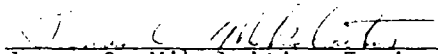
Henry Hass
Dale Pierce

A monitoring inspection of Union Oil's wastewater treatment facilities was made on August 13, 1974. The following information was obtained:

- 1) The storm water pond was at a low water level. Most of the surface was covered with oil. The storm water pond discharges to the API separator.
- 2) The API separator had some oil carryover and the discharge appeared to have a slight green color.
- 3) The equalization basin receives stripper sour water, API discharge, and the centrate from the sludge thickener. The basin contained some oil and had a turbid green appearance.
- 4) Lime is added to the equalization basin overflow and then enters a primary settling tank. A slight oil film was still noticed. The discharge was also green and turbid.
- 5) The primary effluent is pH adjusted to 8.5-9.0 and discharged to two parallel activated sludge aeration tanks. All four mechanical aerators were in operation. The surface was covered with a heavy brown foam. The mixed liquor suspended solids concentration is about 1200 mg/l. The final clarifier was covered over one third of its surface with a scum layer and had a turbid green appearance.
- 6) The sludges are thickened in a centrifuge units. During this visit the unit was covered with a heavy scum layer. The thickened sludge is hauled by Conservation Chemical Co. to Gary, Indiana.
- 7) The flow at the outfall to the I&M canal was 3.5 MGD. The final effluent was clear and odorless. There was no addition at chlorine. The laboratory analysis of the final effluent, taken at the outfall are listed below:

Lab No.	C001273
pH	7.6
Phosphorus	0.13
BOD	8
COD	105
Phenols	0.036
Fecal Coliform	100/100ml
Ammonia N.	51.0
Nitrate & Nitrite N	0
TDS/SC	1830
TSS	2

Arsenic	0.003
Barium	0
Cadmium	0
Chromium (hex)	0
Chromium (tri)	0.05
Cooper	0
Cyanide	0.08
Iron(total)	0.1
Lead	0
Manganese	0.01
Mercury	0.2 ug/l
Nickel	0
Selenium	0.02
Zinc	0
Oil	4
ROE	1744


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JCM/sap
10/15 - 10/16/74